west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

October 30, 2014

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-4902320, issued to TRANS ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: FREELAND 3H
Farm Name: FREELAND, ET AL
API Well Number: 47-4902320
Permit Type: Horizontal 6A Well
Date Issued: 10/30/2014

API Number 47 049 02320

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. The entire well pad shall be bermed so as to prevent runoff from leaving the pad during drilling and completion operations.

2. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.

3. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.

4. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.

5. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.

6. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations,* 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.

7. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.

8. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.

9. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

10. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

CEMENTING ADDITIVES'

Type	Product no.	Usage	Properties	Product properties: Application temperature	Salt tolerance	Anti-freezing	Solubility	Specification
Multi-functional fluid loss additives	CQ610L Liquid	Water mixed	White or faint yellow viscous liquid	≤180℃	Saturated salt water	-15℃	Soluble in cold water	Cement slurry has good fluidity, and it is not extended.
AMPS quadripolymer	CQ610S-P Powder	Dry & water mixed dual purpose	White or faint yellow powder	≤180℃	Saturated salt water	—	Soluble in cold water	High purity, small dosage, good slurry fluidity and not extended.
	CQ610S-D High purity powder	Dry mixed	Pray powder	≤180℃	Saturated salt water	—	Partly water soluble	Easy storage, long durability good slurry fluidity and not extended.
	CQ610S-T Powder	Dry & water mixed dual purpose	White powder	≤180℃	Saturated salt water	—	Soluble in cold water	Using flexibly and conveniently. slurry's fluidity is good and not extended.
	CQ510L Liquid	Water mixed	White or faint yellow viscous liquid	≤150℃	18% salt water	-15℃	Soluble in cold water	Slurry's fluidity is good, slight extend.
AMPS terpolymer	CQ510S-P High purity powder	Dry & water mixed dual purpose	White or faint yellow powder	≤150℃	18% salt water	—	Soluble in cold water	High purity, small dosage, good slurry fluidity and slight extended.
	CP510S Powder	water mixed dual purpose	faint yellow powder	≤150℃	18% salt water	—	Partly Soluble in cold water	Easy storage, long compatibility with all kinds cement and it has the properties of fluid loss controlling. Cement slurry with it is slight extended.
Moderate temperature retarder	CH210L Liquid	Water mixed	Colorless liquid	55-110℃	18% salt water	-2℃	Soluble in cold water	—
	CH210S-P High purity powder	Dry & water mixed dual purpose	White powder	55-110℃	18% salt water	—	Soluble in cold water	High purity and low dosage.
	CH210S-D Powder	Dry mixed	Gray powder	55-110℃	18% salt water	—	Partly water soluble	Easy storage and long durability.
	CH210S-T Powder	Dry & water mixed dual purpose	White powder	55-110℃	18% salt water	—	Soluble in cold water	Using flexibly and conveniently
High temperature retarder	CH310L Liquid	Water mixed	Brownish black liquid	90-150℃	18% salt water	-12℃	Soluble in cold water	Have certain dispersion.
	CH410L Liquid	Water mixed	Brown liquid	90-150℃	18% salt water	-9℃	Soluble in cold water	Have certain dispersion.
	CH910S-D Powder	Dry mixed	Gray powder	on-150℃	18% salt water	—	Partly water soluble	Easy storage, long durability, strengthen grow is mold.

47049023 20

Attachment V - Planned Additives to be used in Fracturing or Stimulations

Product Name	Product Use	Chemical Name	CAS Number
ALPHA 1427	Biocide	Didecyl Dimethyl Ammonium Chloride	007173-51-5
		Ethanol	000064-17-5
		Glutaraldehyde (Pentanediol)	000111-30-8
		Quaternary Ammonium Compound	068424-85-1
		Water	007732-18-5
BF-7L	Buffer	Potassium Carbonate	000584-08-7
ClayCare	Clay Stabilizer	Choline Chloride	000067-48-1
		Water	007732-18-5
Enzyme G-I	Breaker	No Hazardous Components	NONE
ENZYME G-NE	Breaker	No Hazardous Components	NONE
FRW-18	Friction Reducer	Petroleum Distillate Hydrotreated Light	064742-47-8
GW-3LDF	Gel	Petroleum Distillate Blend	N/A-014
		Polysaccharide Blend	N/A-021
SCALETROL 720	Scale Inhibitor	Diethylene Glycol	000111-46-6
		Ethylene Glycol	000107-21-1
XLW-32	Crosslinker	Boric Acid	010043-35-3
		Methanol (Methyl Alcohol)	000067-56-1
APB01 (AMMONIUM PERSUFATE BREAKER)	Breaker	Ammonium Persulfate	007727-54-0
B05 (LOW PH BUFFER)	Buffer	Acetic acid	000064-19-7
BXL03 Borate XL Delayed High Temp	Crosslinker	No Hazardous Components	NONE
FRW-200	Friction Reducer	No Hazardous Components	NONE
HVG01 (TURQUOISE-1 BULK)	Gelling Agent	Petroleum Distillate Hydrotreated Light	064742-47-8
KCLS-4	Clay Stabilizer	No Hazardous Components	NONE
LTB-1	Breaker	Ammonium Persulfate	N/A
		Ethanol	000064-17-5

EC6110A	Biocide	Glutaraldehyde (Pentanedial)	000111-30-8
		Quaternary Ammonium Compounds	N/A-063
EC6629A	Biocide	No Hazardous Components	NONE
WBK-133 OXIDIZER	Breaker	Ammonium Persulfate	007727-54-0
WBK-134	Breaker	Ammonium Persulfate	007727-54-0
		Crystalline Silica (Quartz Sand, Silicon Dioxide)	014808-60-7
WCS-631LC	Clay Stabilizer	Proprietary Non Hazardous Salt	N/A-229
		Water	007732-18-5
WFR-55LA	Friction Reducer	No Hazardous Components	NONE
WGA-15L	Gel	Petroleum Distillate Hydrotreated Light	064742-47-8
WPB-584-L	Buffer	Potassium Carbonate	000584-08-7
		Potassium Hydroxide	001310-58-3
WXL-101LE	Corsslinker	No Hazardous Components	NONE
WXL-101LM	Crosslinker	Petroleum Distillate Hydrotreated Light	064742-47-8
WXL-105L	Crosslinker	Water	007732-18-5
		Ethylene Glycol	000107-21-1
		Boric Acid	010043-35-3
		Ethanolamine	000141-43-5
B244 Green-Cide 25G	Biocide	Glutaraldehyde	111-30-8
L071 Temporary Clay Stabilizer	Clay Stabilizer	Cholinium Chloride	67-48-1
Breaker J218	Breaker	Diammonium Peroxidisulphate	7727-54-0
EB-Clean* J475 Breaker		Diammonium Peroxidisulphate	7727-54-0
Friction Reducer B315	Friction Reducer	Distillates (petroleum), Hydrotreated light Aliphatic Alcohol Glycol Ether	64742-47-8 Proprietary
Friction Reducer J609		Ammonium Sulfate	7783-20-2
Water Gelling Agent J580	Gel	Carbohydrate Polymer	Proprietary
Scale Inhibitor B317	Scale Inhibitor	Trisodium ortho phosphate Ethane-1, 2-diol	7601-54-9 107-21-1
Borate Crosslinker J532	Crosslinker	Aliphatic polyol Sodium tetraborate decahydrate	Proprietary 1303 96-4
Crosslinker J610		Aliphatic polyol Potassium hydroxide	Proprietary 1310 58-3

WW-6B
(9/13)

4704902320

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

4 374

1) Well Operator: Trans Energy Inc | 494481575 (Operator ID) | Marion (County) | Mannington (District) | Glover Gap (Quadrangle)

2) Operator's Well Number: Freeland 3H Well Pad Name: Freeland

3) Farm Name/Surface Owner: Freeland ET AL Public Road Access: County Road 250/4

4) Elevation, current ground: 1335' Elevation, proposed post-construction: As Built

5) Well Type (a) Gas ■ Oil _____ Underground Storage _____
Other _____
(b)If Gas Shallow ■ Deep _____
Horizontal ■

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):
Marcellus Shale 7200' 60' thick 4000 psi

8) Proposed Total Vertical Depth: 7,200'

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 13,000"

11) Proposed Horizontal Leg Length: 5,800'

12) Approximate Fresh Water Strata Depths: 60', 150', 900'

13) Method to Determine Fresh Water Depths: Water Wells drilled in the County, information provided by Health Dept.

14) Approximate Saltwater Depths: 1525'

15) Approximate Coal Seam Depths: 900'

16) Approximate Depth to Possible Void (coal mine, karst, other): n/a

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes ☑ No ☐

(a) If Yes, provide Mine Info: Name: Loveridge
Depth: 900'
Seam: Pittsburgh
Owner:

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Office of Oil and Gas
JUN 06 2014
WV Department of
Environmental Protection

WRA 5-23-14

WW-6B
(9/13)

4704902320

18) **CASING AND TUBING PROGRAM**

TYPE	Size	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling	INTERVALS: Left in Well	CEMENT: Fill-up (Cu. Ft.)
Conductor	20	new	J-55	94	90'	90'	CTS
Fresh Water	13-3/8	new	J-55	54.5	1000'	1000'	CTS
Coal							
Intermediate	9-5/8	new	J-55	36	3000'	3000'	CTS
Production	5-1/2	new	P-110	20	13000'	13000'	CTS
Tubing							
Liners							

WRH
5-23-14

TYPE	Size	Wellbore Diameter	Wall Thickness	Burst Pressure	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26	0.438	1530	Type 1	13 cu ft/sk
Fresh Water	13-3/8	17-1/2	.38	2730	Type 1	1.25 cu ft/sk
Coal						
Intermediate	9-5/8	12-1/2	.352	3520	Type 1	1.26 cu ft/sk
Production	5-1/2	8-3/4	.361	12630	Poz H Class H	1.18 cu ft/sk
Tubing						
Liners						

PACKERS

Kind:				
Sizes:				
Depths Set:				

4704902320

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and Complete horizontal well in the Marcellus Shale. Lateral to be approximately 5400' in length. Under no circumstance will drilling penetrate below elevation before freshwater casing is set.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Fracture 17-21 stages with Proppant: 150,000 of 100 mesh sand 80,000 of 20/40 white sand, 169,998 of 40/70 white sand.
Fluid summary: 1,500 of 15% HCL, 412,665 of Slickwater I, 11,000 Slickwater II.

Max Pressure =10,000 psi
Max Rate = 100 bbl./min

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): As-Built location 8.86 acres

22) Area to be disturbed for well pad only, less access road (acres): No disturbance - As Built

23) Describe centralizer placement for each casing string:

Fresh Water String - 1 centralizer every 160'
Intermediate String - 1 centralizer every 100' from 3300' to 900'
Production String - 1 centralizer every 80' from TD to above ROP (7000')

24) Describe all cement additives associated with each cement type:

Standard Type 1 cement - retarder and fluid loss (surface and interm)
Type 1 = 2% $CaCl_2$ + Y4# Flake - Surface Cement mixed @ 15.6 ppg $CaCl_2$, Flake (cellophane flake)
Type 1 = 2% $CaCl_2$ + Y4# Flake - Intermediate Cement mixed @ 15.6 ppg
Class H in lateral - retarder and fluid loss and free water additive

25) Proposed borehole conditioning procedures:

Before cement casing mud will be thinned and all gas will be circulated out of the mud before cementing.

*Note: Attach additional sheets as needed.

Trans Energy, Inc.
Oil and Gas Exploration and Development

4704902320

May 22, 2014

Ms. Laura Cooper
West Virginia DEP
601 57th Street
Charleston, WV 25304

Re: Void Encounter
Freeland 3H and 4H

Dear Laura,

In follow up to your email dated 6/25/2012 referencing the Freeland 1H and 2H Well Permit Applications. Your email at that time noted that the locations spots in close proximity to both mined and permitted to mine areas, if encountered we will run casing no deeper than 50' beyond the void and set a basket as the ceiling and at the bottom and grout/cement, and we will notify the inspector immediately.

Once you have reviewed and would have any questions regarding this permit please feel free contact me at 304-684-7053 ext. 26 or Leslie Gearhart at ext. 32

As always thank you for your help in these matters.

Sincerely yours,

Trans Energy Incorporated

Debra A. Martin
Land Administrator

DM/dm

210 2nd Street, P.O. Box 393 St. Marys, WV 26170 304.684.7053 Fax 304.684.3658
www.transenergyinc.com

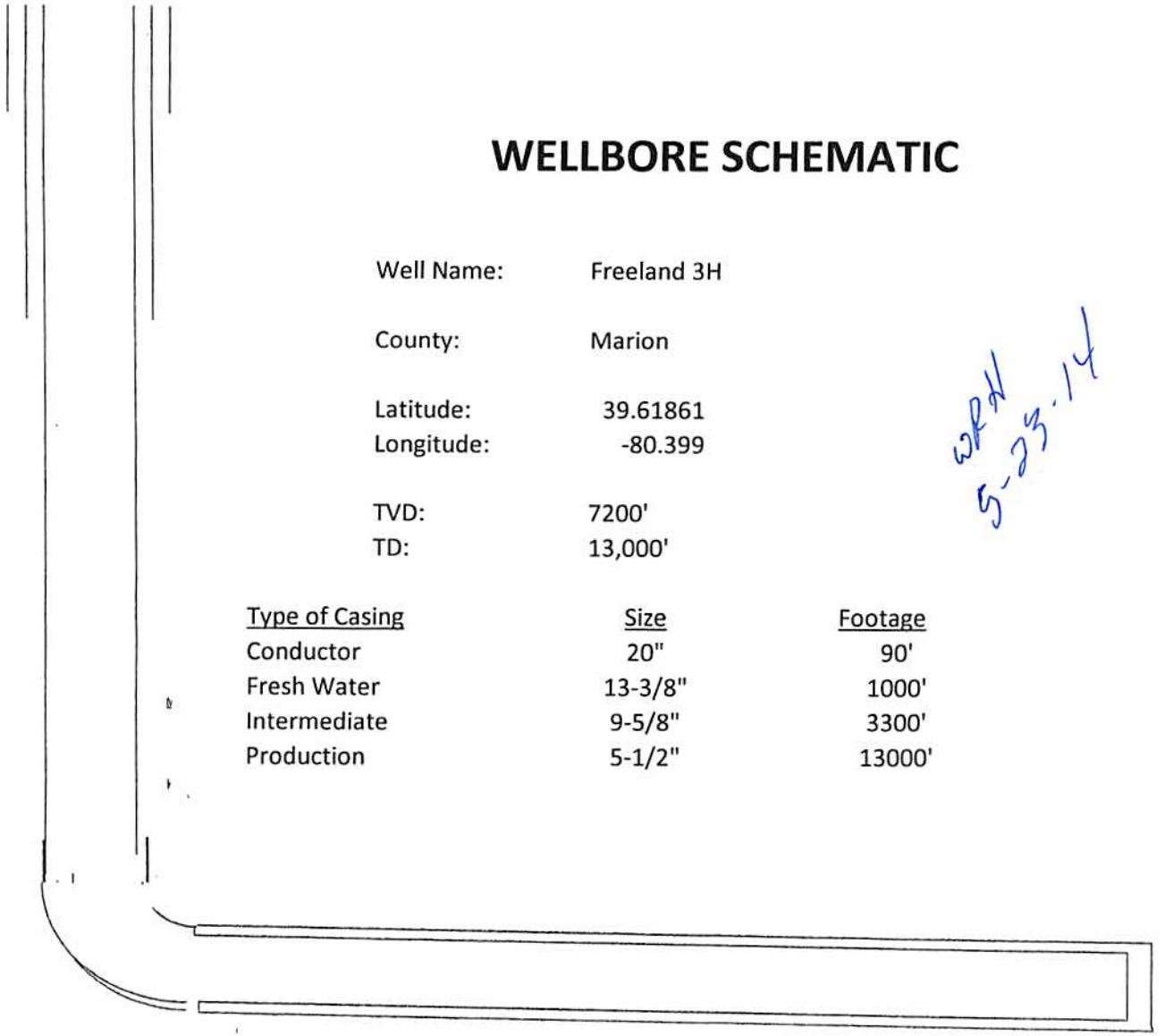
CEMENTING ADDITIVES

4704902320

Type	Product no.	Usage	Properties	Application temperature	Salt resistance	Anti-freezing	Solubility	Specification
Multi-functional fluid loss additives	AMPS quadripolymer	CG610L Liquid	Water mixed	White or faint yellow viscous liquid	≤180℃	Saturated salt water	-15℃	Soluble in cold water	Cement slurry has good fluidity, and it is not extended.
		CG610S-P Powder	Dry& water mixed dual purpose	White or faint yellow powder	≤180℃	Saturated salt water	—	Soluble in cold water	High purity, small dosage, good slurry fluidity and not extended.
		CG610S-D High purity powder	Dry mixed	Pray powder	≤180℃	Saturated salt water	—	Partly water soluble	Easy storage, long durability good slurry fluidity and not extended.
		CG610S-T Powder	Dry& water mixed dual purpose	White powder	≤180℃	Saturated salt water	—	Soluble in cold water	Using flexibly and conveniently, slurry's fluidity is good and not extended.
	AMPS terpolymer	CG510L Liquid	Water mixed	White or faint yellow viscous liquid	≤150℃	18% salt water	-15℃	Soluble in cold water	Slurry's fluidity is good, slight extend.
		CG510S-P High purity powder	Dry& water mixed dual purpose	White or faint yellow powder	≤150℃	18% salt water	—	Soluble in cold water	High purity, small dosage, good slurry fluidity and slight extended.
		CF510S Powder	water mixed dual purpose	faint yellow powder	≤150℃	18% salt water	—	Partly Soluble in cold water	Easy storage, long compatibility with all kinds cement and it has the properties of fluid loss controlling. Cement slurry with it is slight extended.
Moderate temperature retarder		CH210L Liquid	Water mixed	Colorless liquid	55-110℃	18% salt water	-2℃	Soluble in cold water	—
		CH210S-P High purity powder	Dry& water mixed dual purpose	White powder	55-110℃	18% salt water	—	Soluble in cold water	High purity and low dosage.
		CH210S-D Powder	Dry mixed	Gray powder	55-110℃	18% salt water	—	Partly water soluble	Easy storage and long durability.
		CH210S-T Powder	Dry& water mixed dual purpose	White powder	55-110℃	18% salt water	—	Soluble in cold water	Using flexibly and conveniently.
High temperature retarder		CH310L Liquid	Water mixed	Brownish black liquid	90-150℃	18% salt water	-12℃	Soluble in cold water	Have certain dispersion.
		CH410L Liquid	Water mixed	Brown liquid	90-150℃	18% salt water	-9℃	Soluble in cold water	Have certain dispersion.
		CH510S-D Powder	Dry mixed	Gray powder	90-150℃	18% salt water	—	Partly water soluble	Easy storage, long durability, strengthen grow is mild

4704902320

WELLBORE SCHEMATIC



Well Name:	Freeland 3H
County:	Marion
Latitude:	39.61861
Longitude:	-80.399
TVD:	7200'
TD:	13,000'

WRW
5-23-14

Type of Casing	Size	Footage
Conductor	20"	90'
Fresh Water	13-3/8"	1000'
Intermediate	9-5/8"	3300'
Production	5-1/2"	13000'

WW-9
(9/13)

API Number 47 - _____ - _____
Operator's Well No. Freeland 3H

4704902320

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Trans Energy Inc OP Code 494481575

Watershed (HUC 10) Big Run of Pyles Fork Quadrangle Glover Gap

Elevation 1335' County Marion District Mannington

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☑ No ☐

Will a pit be used? Yes ☐ No ☑

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes ☐ No ☑ If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

_____ Land Application
_____ Underground Injection (UIC Permit Number _____)
_____ Reuse (at API Number _____)
_____ Off Site Disposal (Supply form WW-9 for disposal location)
■ Other (Explain All frac fluids will be flowed back into storage containers and Buckeye Water Service Company will haul to an approved water disposal facilities

Will closed loop system be used? If so, describe: yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Freshwater mud until reaching Marcellus then synthetic

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

Additives to be used in drilling medium? None

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. All cuttings will be hauled to approved landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Sawdust

-Landfill or offsite name/permit number? Short Creek Landfill SWF - 1034

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

RECEIVED
Office of Oil and Gas
JUN 08 2014
WV Department of
Environmental Protection

Company Official Signature _____

Company Official (Typed Name) Leslie Gearhart

Company Official Title VP-Operations

Subscribed and sworn before me this 9th day of May, 2014

Debra A Martin Notary Public

My commission expires November 29, 2020

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Debra A. Martin
Trans Energy Incorporated
210 2nd Street
St. Mary's, WV 26170
My Commission Expires Nov. 29, 2020

Form WW-9

4704902320

Operator's Well No. Freeland 3H

Trans Energy Inc

Proposed Revegetation Treatment: Acres Disturbed As Built 8.86 acres Prevegetation pH _____

Lime 2 Tons/acre or to correct to pH 65

Fertilizer type _____

Fertilizer amount 600 lbs/acre

Mulch 90 Bales Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Meadow Mix	100	Meadow Mix	100
Oats or Rye	50	Oats or Rye	50

Attach:
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Bill Hendricks

Comments: _____

Title: Environmental Inspector Date: 5-23-14

Field Reviewed? (✓) Yes ( ) No

47049023 20

WRH
5-23-14

TRANS ENERGY, INC.

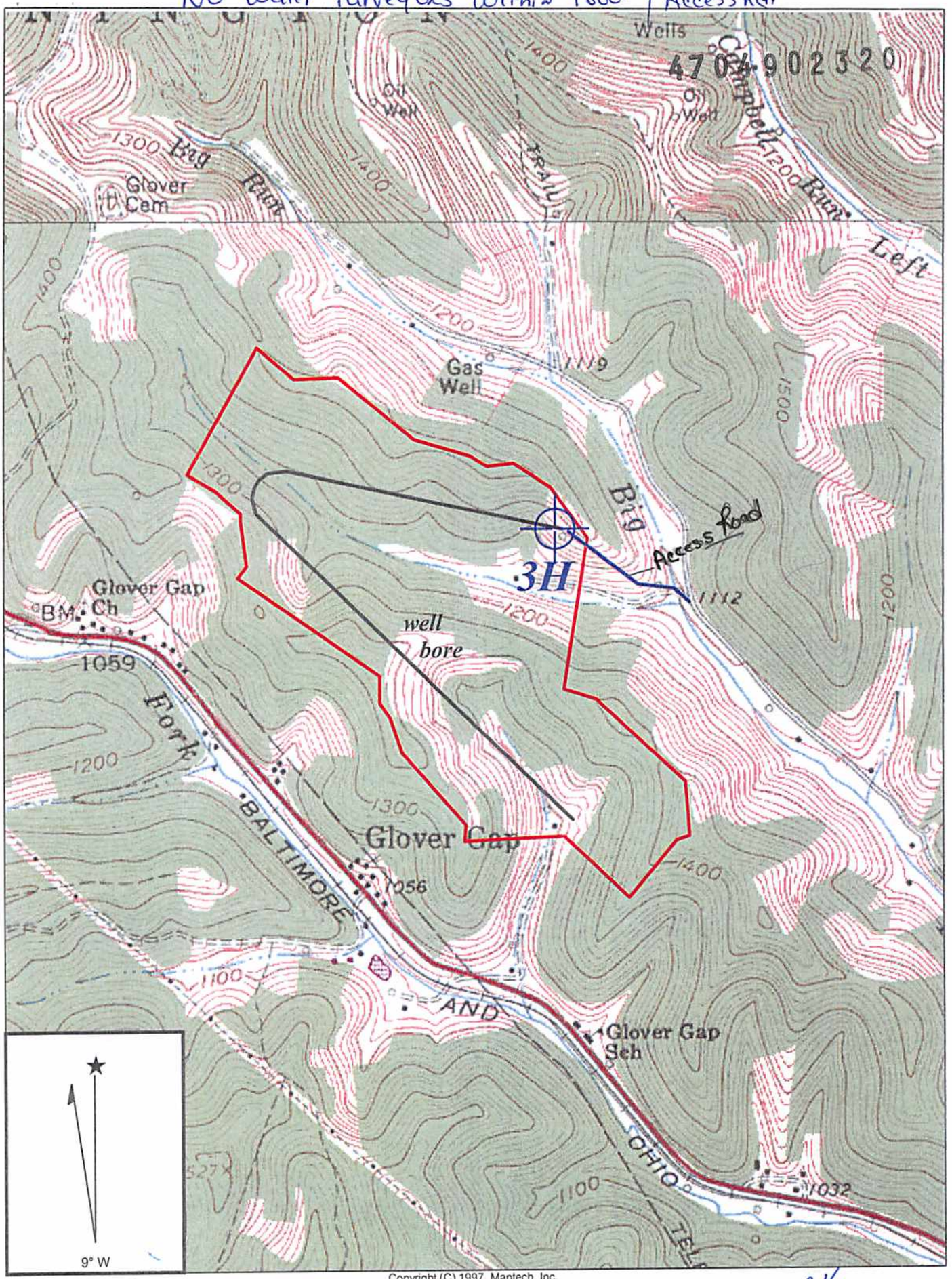
Well Site Safety Plan

Freeland Pad

Marion County

5/20/14

No Water Purveyors within 1500' / Access Rd.



ORH
5-23-14

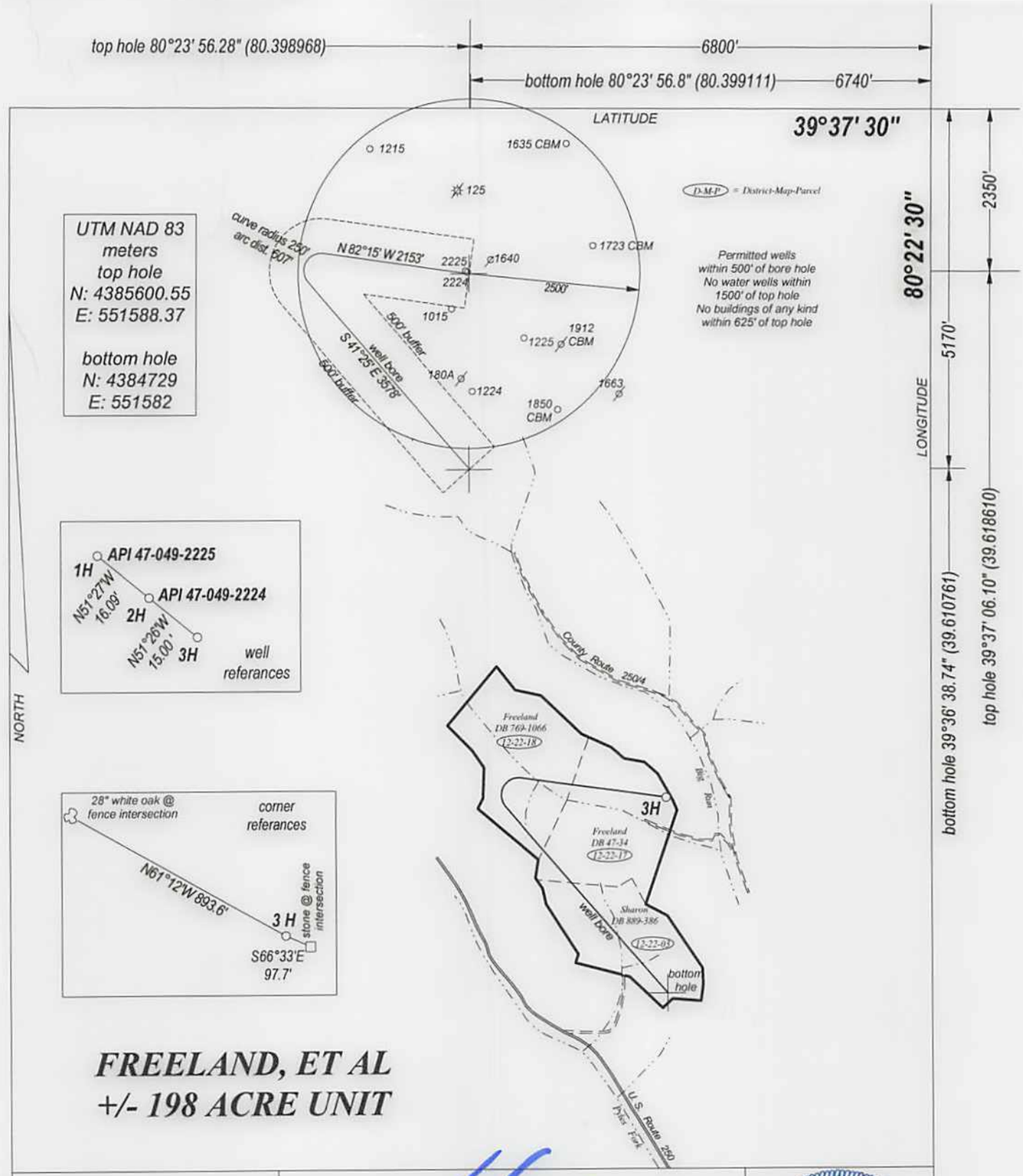
GLOVER GAP QUADRANGLE

SCALE 1" = 1000'

TRANS ENERGY, INC.

WELL: FREELAND 3H
FREELAND, ET AL +/- 198 ACRE UNIT

MANNINGTON DISTRICT MARION COUNTY WEST VIRGINIA



FREELAND, ET AL
+/- 198 ACRE UNIT

FILE NO.
DRAWING NO.
SCALE 1" = 2000'
MINIMUM DEGREE
OF ACCURACY 1 : 2500
PROVEN SOURCE
OF ELEVATION GPS
OBSERVATION

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) _____
PROFESSIONAL SURVEYOR: 551

WILLIAM R. MOSSOR
LICENSED
No. 551
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

ask 4
5-23-A

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

DATE FEBRUARY 11TH, 2014
OPERATORS WELL NO. FREELAND 3H

API 47 - 049 - 02320 H6A
STATE COUNTY PERMIT

WELL TYPE: OIL XX GAS XX LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF GAS) PRODUCTION XX STORAGE ___ DEEP ___ SHALLOW XX

LOATION: ELEVATION 1335' WATER SHED BIG RUN OF PYLES FORK
DISTRICT MANNINGTON COUNTY MARION QUADRANGLE GLOVER GAP

SURFACE OWNER FREELAND, ET AL ACREAGE 68.25
OIL & GAS ROYALTY FREELAND, ET AL LEASE AC. +/- 198

PROPOSED WORK: DRILL XX CONVERT ___ DRILL DEEPER ___ REDRILL ___
FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___
PERFORATE NEW FORMATION ___
OTHER PHYSICAL CHANGE IN WELL ___
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___

TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 7200'

WELL OPERATOR TRANS ENERGY, INC.
ADDRESS P. 0. BOX 393
ST. MARYS, WV 26170

DESIGNATED AGENT LOREN BAGLEY
ADDRESS P. 0. BOX 393
ST. MARYS, WV 26170

FORM WW - 6
COUNTY NAME
PERMIT